

In re Application of:

David Delgado

Serial No.:

10/679,880

Filed:

October 6, 2003

For:

FLEXIBLE WELDING IMPLEMENT

AND METHOD OF

MANUFACTURING SAME

Group Art Unit:

1725

Examiner:

Kerns, Kevin P.

Atty. Docket: ITWO:0068/YOD

(14099)

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March 15, 2007

Date

Helen Tinsley

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF (37 C.F.R. §§ 41.37)

In response to the Notification of Non-Compliant Appeal Brief mailed on March 6, 2007, Applicants resubmit the previous Appeal Brief (filed January 3, 2007), revised to address the above-referenced notification of non-compliance.

The Commissioner is authorized to charge the requisite fee of \$500.00, IF NOT ALREADY CHARGED, and any additional fees which may be required, to the credit card listed on the attached PTO-2038. However, if the PTO-2038 is missing, if the amount listed thereon is insufficient, or if the amount is unable to be charged to the credit card for any other reason, the Commissioner is authorized to charge Deposit Account No. 06-1315; Order No. ITWO:0068/YOD (14099).

1. **REAL PARTY IN INTEREST**

The real party in interest is Illinois Tool Works, Inc., the Assignee of the above-referenced application by virtue of the Assignment to Illinois Tool Works, Inc., recorded at reel 014589, frame 0210, and dated October 6, 2003. Accordingly, Illinois Tool Works, Inc., will be directly affected by the Board's decision in the pending appeal.

2. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal.

3. STATUS OF CLAIMS

Claims 1, 3-27, 35 and 37-42 are currently pending, are currently under final rejection and, thus, are the subject of this Appeal. Claims 2, 28-34, and 36 were previously cancelled.

4. STATUS OF AMENDMENTS

There are no outstanding amendments to be considered by the Board.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to the field of arc welding and, particularly, to a welding torch having a degree of flexibility enabling an electrode of the torch to be positioned relative to a user's hand. *See*, Application, paragraph 3. Further, the present invention relates to methods and systems for conveying shielding gas and a cooling fluid to a flexible torch head via a plurality of flexible tubes. *See*, *id*. at paragraph 5.

The Application contains 4 independent claims, namely, claims 1, 10, 18 and 35, all of which are the subject of this Appeal. The subject matter of these claims is summarized below.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with claim 1 provides a flexible welding implement comprising a torch head (e.g., 46) operable to couple electricity to a welding electrode (e.g., 44) disposed therein. See, e.g., id. at paragraphs 15, 17; see also Fig. 1. Further, the flexible welding implement comprises a cooling fluid supply tube (e.g., 58) operable to convey a cooling fluid (e.g., 24) to the torch head, and a cooling fluid return tube (e.g., 60) operable to convey the cooling fluid from the torch head. See, e.g., id. at paragraph 19; see also Figs. 4-6. The welding implement further comprises a first biasing member (e.g., 80) comprising a helix of non-tubular material defining an axial flow path and operable to flexibly and fluidicly couple the cooling fluid (e.g., 24) supply tube to the torch head (e.g., 46), such that the cooling fluid flows axially through the flow path of the first biasing member, and a second biasing member (e.g., 82) comprising a helix of non-tubular material defining an axial flow path and operable to flexibly couple the cooling fluid return tube to the torch head. See, e.g., id. at paragraphs 22, 23; see also Figs. 4-6.

With regard to the aspect of the invention set forth in independent claim 10, discussions of the recited features of claim 10 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with claim 10 provides a flexible welding implement comprising a torch (e.g., 14) coupleable to a handle (e.g., 52). See, e.g., id. at paragraphs 15 and 18; see also Fig. 1. The handle comprises a torch head (e.g., 46) operable to receive a cooling liquid (e.g., 24). See, e.g., id. at paragraph 16; see also Fig. 1. The handle further comprises a plurality of non-tubular coils (e.g., 76, 80 and 82) disposed generally parallel with one another and with an axis of the handle within the torch to enable the torch head (e.g., 46) to be displaced relative to the handle, wherein the torch directs the cooling liquid to flow through the coils to and from the torch head. See, e.g., id. at paragraphs 22, 23; see also Figs. 4-6.

With regard to the aspect of the invention set forth in independent claim 18, discussions of the recited features of claim 18 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with claim 18 provides a welding implement comprising a torch (e.g., 14). See, e.g., id. at paragraph 15; see also Fig. 1. The torch comprises a torch head (e.g., 46), and a tripod support system secured (e.g., 56-60) to the torch head to flexibly support the torch head. See, e.g., id. at paragraphs 23, 26; see also Figs. 4-6. The tripod support system comprises a first leg (e.g., 56) comprising a first spring (e.g., 76), a second leg (e.g., 58) comprising a second spring (e.g., 80), and a third leg (e.g., 60) comprising a third spring (e.g., 82), the springs being disposed generally parallel to an axis of a handle supporting the torch head. See, e.g., id. at paragraphs 21-23; see also Figs. 4-6.

With regard to the aspect of the invention set forth in independent claim 35, discussions of the recited features of claim 35 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with claim 35 provides a welding implement comprising a torch head (e.g., 46). See, e.g., id. at paragraph 15; see also Fig. 1. The welding implement further comprises a plurality of tubes (e.g., 56-60) operable to convey fluids (e.g., 20, and 24), and a plurality of coils (e.g., 76, 80 and 82) comprising a helix of non-tubular material defining an axial flow path and secured to the torch head to enable the torch head (e.g., 46) to be angled relative to the plurality of tubes and to route fluids axially through the coils. See, e.g., id. at paragraphs 22, 23 and 26; see also Figs. 1 and 4-6.

A benefit of the invention, as recited in these claims, is the ability to provide a flexible welding implement having improved flexibility over existing welding implements and to provide better flow characteristics for fluids flowing through the flexible portions of the welding implement. This is a clear difference and distinction from the prior art, as discussed below.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's first ground of rejection in which the Examiner rejected claims 18-21 under 35 U.S.C. § 102(b) and/or 102(a) as being anticipated by Appellant's purported admitted prior art (paragraph 3 of the specification).

Second Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's second ground of rejection in which the Examiner rejected claims 1, 3, 10, 11, 13-25, 35, and 37-41 under 35 U.S.C. § 102(b) as being anticipated by Keller et al. (U.S. Patent No. 4,145,595, hereinafter "Keller").

Third Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's third ground of rejection in which the Examiner rejected claims 4-9 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Delgado et al. (U.S. Patent No. 6,855,905, hereinafter "Delgado").

Fourth Ground of Rejection for Review on Appeal:

The Examiner also rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Rehrig (U.S. Patent No. 5,403,987, hereinafter "Rehrig").

Fifth Ground of Rejection for Review on Appeal:

The Examiner also rejected claims 26, 27, and 42 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Willgohs et al. (U.S. Patent No. 3,999,033, hereinafter "Willgohs").

7. **ARGUMENT**

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under Sections 102 and 103. Accordingly, Appellant respectfully requests full and favorable consideration by the Board, as Appellant strongly believes that claims 1, 3-27, 35 and 37-42 are currently in condition for allowance.

A. First Ground of Rejection:

The Examiner rejected claims 18-21 under 35 U.S.C. § 102(b) and/or 102(a) as being anticipated by Appellant's purported admitted prior art (paragraph 3 of the specification).

1. <u>Judicial precedent has clearly established a legal standard for a prima</u> facie anticipation rejection.

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). Thus, for a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the *identical* invention "in as complete detail as contained in the ... claim" to support a prima facie case of anticipation. Richardson v. Suzuki Motor Co., 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Appellant need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

2. The Examiner's rejection of independent claims 18 is improper because the rejection fails to establish a *prima facie* case of anticipation.

Independent claim 18 recites:

A welding implement, comprising:
a torch, comprising:
a torch head;
a tripod support system secured to the torch head to flexibly support the torch head, the tripod support system comprising:

a first leg comprising a first spring; a second leg comprising a second spring; and a third leg comprising a third spring; the springs being disposed generally parallel to an axis of a handle supporting the torch head.

Appellant's purported admitted prior art fails to disclose each element of independent claim 18 which recites, *inter alia*, "a tripod support system secured to the torch head to flexibly support the torch head, the tripod comprising: a first leg comprising a first spring; a second leg comprising a second spring; and a third leg comprising a third spring" (emphasis added).

The portion of the specification cited by the Examiner as admitted prior art is paragraph 3 which reads:

Welding implements have been developed to enable the torch to have a degree of flexibility so that the electrode may be positioned relative to a user's hand. In a liquid-cooled torch, the flexibility is achieved by using a series of coiled tubes to secure the torch head to the torch. A shield gas is conveyed through the interior of one of the tubes. Additional tubes are used to convey cooling liquid to and from the torch head. The tubes are coiled around each other and may be flexed to reposition the torch head.

Specification, paragraph 3.

The Examiner further contended that the purported admitted prior art disclosure includes, *inter alia*, "a plurality of biasing members (in the form of a series of coiled tubes, or springs, flexibly coiled around each other) ... serving as a tripod support

system, in the form of three springs/coils that are flexibly secured to the torch head." See, Office Action mailed May 8, 2006, page 3.

However, Appellant submits that the passage in the present application, referred to by the Examiner as admitted prior art, fails to teach each and every element of claim 18. In particular, nothing in the paragraph cited by the Examiner suggests a *tripod support system*, as recited in claim 18. In fact, the Examiner admitted that the series of coiled tubes which act as the biasing members are "coiled around each other." *Id.* By definition, the three biasing members of the recited *tripod support system* must be uncoupled (certainly not coiled around each other) in order to form the requisite three legs of the *tripod support system*, as recited in claim 18. Consequently, because the cited reference fails to teach each and every element of claim 18, the purported admitted prior art cannot anticipate independent claim 18 or the claims depending therefrom.

Accordingly, Appellant requests the Board to overturn the rejection and allow claims 18-21.

B. Second Ground of Rejection:

The Examiner rejected claims 1, 3, 10, 11, 13-25, 35, and 37-41 under 35 U.S.C. § 102(b) as being anticipated by Keller. While the Examiner rejected each of independent claims 1, 10 and 35 by Keller, each of these independent claims will be discussed separately below.

1. The Examiner's rejection of independent claims 1, 10 and 35 is improper because the rejection fails to establish a *prima facie* case of anticipation.

Independent claim 1 recites:

A flexible welding implement, comprising:

a torch head operable to couple electricity to a welding electrode disposed therein;

a cooling fluid supply tube operable to convey a cooling fluid to the torch head;

a cooling fluid return tube operable to convey the cooling fluid from the torch head;

a first biasing member comprising a helix of nontubular material defining an axial flow path and operable to flexibly and fluidicly couple the cooling fluid supply tube to the torch head such that the cooling fluid flows axially through the flow path of the first biasing member; and

a second biasing member comprising a helix of nontubular material defining an axial flow path and operable to flexibly couple the cooling fluid return tube to the torch head.

Independent claim 10 recites:

A flexible welding implement, comprising:
a torch coupleable to a handle, comprising:
a torch head operable to receive a cooling liquid; and
a plurality of non-tubular coils disposed generally
parallel with one another and with an axis of the handle
within the torch to enable the torch head to be displaced
relative to the handle, wherein the torch directs the cooling
liquid to flow through the coils to and from the torch head.

Independent claim 35 recites:

A welding implement, comprising:
a torch head;
a plurality of tubes operable to convey fluids; and
a plurality of coils comprising a helix of non-tubular
material defining an axial flow path and secured to the torch
head to enable the torch head to be angled relative to the
plurality of tubes and to route fluids axially through the coils.

In the Office Action mailed May 8, 2006, the Examiner suggested that "[b]ecause the helix [of Keller] is embedded in and cushioned by an elastomeric material (serving as

a tube support member), it is also feasible to make a double helix (forming a plurality of biasing members) of tubular or solid wire when it is necessary to supply a cooling liquid having both a flow inlet (supply line) and a flow outlet (return line) to the torch (both lines of which would include axial flow components), the combination of which would serve as a tripod support system, in the form of three springs/coils that are flexibly secured to the torch head while being disposed generally parallel with one another and with an axis of a handle supporting the torch head." See, Office Action mailed May 8, 2006, pages 3-4 (emphasis in original). To support this position, the Examiner relied upon lines 19-27 on page 5 of the Keller reference which read:

Because the helix is embedded in and cushioned by an elastomeric material, it is also feasible to make the double helix of tubular rather than solid wire, this being useful when it is necessary to supply a cooling liquid for the torch through the helix. In this case, one coil of the double helix serves as a flow inlet and the other as a flow outlet, the central bore 29 in the body 28 still providing a passage for the supply of shielding gas.

Appellant respectfully submits that Keller fails to disclose each and every element of independent claims 1, 10, and 35, and thus fails to anticipate these claims. With respect to independent claim 1, the Examiner contended it is "feasible to make a double helix ... of tubular or solid wire." See, Office Action mailed May 8, 2006, page 4. However, in order "to supply a cooling liquid having both a flow inlet (supply line) and a flow outlet (return line)," the double helix would necessarily have to made of tubular material. Otherwise, the only available flow path to the torch head would be through the central bore 29 in the body 28. According to Keller, the central bore 29 appears to be reserved for the passage of shielding gas. Therefore, the double helix in Keller must be made of tubular material in order to provide a cooling supply tube and a cooling return tube, as recited in claim 1. However, because claim 1 clearly recites two biasing members comprising of non-tubular material, Keller cannot anticipate independent claim 1 or the claims depending therefrom.

Keller also fails to anticipate independent claims 10 and 35 for similar reasons. For instance, independent claim 10 recites a "plurality of non-tubular coils ... wherein the torch directs the cooling liquid to flow through the coils to and from the torch head." Here again, according to the Examiner's interpretation of Keller, in order for the cooling liquid to flow to and from the torch head, the coils described in Keller would have to be made of tubular material, as opposed to the non-tubular coils specifically recited in independent claim 10 as amended. Therefore, Keller cannot anticipate independent claim 10 or the claims depending therefrom. Similarly, independent claim 35 recites "a plurality of tubes operable to convey fluids; and a plurality of coils comprising a helix of non-tubular material ... to route fluids axially through the coils." Therefore, for the same reasons, Keller cannot anticipate independent claim 35 or the claims depending therefrom.

For at least these reasons, Appellant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102 and allowance of claims 1, 3, 10, 11, 13-25, 35, and 37-41.

C. Third Ground of Rejection:

The Examiner rejected claims 4-9 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Delgado.

Appellant notes that each of claims 4-9 depends directly or indirectly from independent claim 1. As discussed above, Keller does not disclose each and every element of Appellant's recited invention as claimed in independent claim 1. Further, Delgado does not cure the deficiencies of Keller because it, too, does not disclose each and every element recited by independent claim 1. As a result, dependent claims 4-9, are allowable on the basis of their dependency from an allowable independent claim, as well as for the subject matter separately recited in these dependent claims. Accordingly, Appellant respectfully requests withdrawal of the Examiner's rejection and allowance of claims 4-9.

D. Fourth Ground of Rejection:

The Examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Rehrig.

Appellant notes that each of claim 12 depends indirectly from independent claim 10. As discussed above, Keller does not disclose each and every element of Appellant's recited invention as claimed in independent claim 10. In addition, Rehrig does not cure the deficiencies of Keller because it, too, does not disclose each and every element recited by independent claims 10. As a result, dependent claim 12 is allowable on the basis of its dependency from an allowable independent claim, as well as for the subject matter separately recited in the dependent claim. Accordingly, Appellant respectfully requests withdrawal of the Examiner's rejection and allowance of claim 12.

Fifth Ground of Rejection:

The Examiner rejected claims 26, 27 and 42 under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Willgohs.

Appellant notes that each of claims 26, 27 and 42 depends directly or indirectly from independents claim 18 and 35. Again, Keller does not disclose each and every element of Appellant's recited invention as claimed in independent claims 35. Similarly, as further discussed above, the reference set forth by the Examiner as admitted prior art does not disclose each and every element recited by independent claim 18. Willgohs does not cure the deficiencies of Keller or of the Examiner's reference of admitted prior art because Willgohs, too, does not disclose each and every element recited by independent claims 18 and 35. As a result, dependent claims 26. 27 and 42 are allowable on the basis of their dependency from allowable independent claims, as well as for the subject matter separately recited in these dependent claims. Accordingly, Appellant

respectfully requests withdrawal of the Examiner's rejection and allowance of claims 26, 27 and 42.

Conclusion

Appellant respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: March 15, 2007

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Listing of Claims:

8.

1. A flexible welding implement, comprising:

a torch head operable to couple electricity to a welding electrode disposed therein; a cooling fluid supply tube operable to convey a cooling fluid to the torch head; a cooling fluid return tube operable to convey the cooling fluid from the torch head;

a first biasing member comprising a helix of non-tubular material defining an axial flow path and operable to flexibly and fluidicly couple the cooling fluid supply tube to the torch head such that the cooling fluid flows axially through the flow path of the first biasing member; and

a second biasing member comprising a helix of non-tubular material defining an axial flow path and operable to flexibly couple the cooling fluid return tube to the torch head.

- 3. The flexible welding implement as recited in claim 1, comprising: a gas supply tube operable to convey a gas to the torch head; and a third biasing member operable to flexibly couple the gas supply tube to the torch head.
- 4. The flexible welding implement as recited in claim 1, comprising a second cooling fluid supply tube secured to the torch head, wherein the cooling fluid supply tube is coupled to the second cooling fluid supply tube by the second biasing member.
- 5. The flexible welding implement as recited in claim 4, comprising a flexible tube disposed over the first biasing member to define a fluid channel for the cooling liquid to flow from the cooling fluid supply tube to the second cooling fluid supply tube axially through the center of the first biasing member.

- 6. The flexible welding implement as recited in claim 1, comprising a second cooling fluid return tube secured to the torch head, wherein the cooling fluid return tube is coupled to the second cooling fluid return tube by the second biasing member.
- 7. The flexible welding implement as recited in claim 3, comprising a second gas supply tube secured to the torch head, wherein the gas supply tube is coupled to the second gas supply tube by the third biasing member.
- 8. The flexible welding implement as recited in claim 6, comprising a second flexible tube disposed over the second biasing member and a third flexible tube disposed over the third biasing member.
- 9. The flexible welding implement as recited in claim 3, comprising a handle disposed over the gas supply tube, the cooling fluid supply tube, and the cooling fluid return tube.
 - 10. A flexible welding implement, comprising:
 - a torch coupleable to a handle, comprising:
 - a torch head operable to receive a cooling liquid; and
 - a plurality of non-tubular coils disposed generally parallel with one another and with an axis of the handle within the torch to enable the torch head to be displaced relative to the handle, wherein the torch directs the cooling liquid to flow through the coils to and from the torch head.
- 11. The flexible welding implement as recited in claim 10, comprising a flexible tube disposed over the first coil and a portion of the first tube to define a fluid channel for the cooling liquid to flow axially through the first coil.

- 12. The flexible welding implement as recited in claim 11, wherein the flexible tube comprises heat shrink tubing.
- 13. The flexible welding implement as recited in claim 10, comprising a second coil disposed within the torch to enable the torch head to be displaced relative to the handle, wherein the torch is adapted to direct the cooling liquid to flow from the torch head axially through the second coil to a second tube.
- 14. The flexible welding implement as recited in claim 13, comprising a third coil disposed within the torch to enable the torch head to be displaced relative to the handle, wherein the torch is adapted to direct a gas to flow from a third tube axially through the third coil to the torch head.
- 15. The flexible welding implement as recited in claim 14, wherein the first tube is coupleable to a cooling liquid supply line, the second tube is coupleable to a cooling liquid return line, and the third tube is coupleable to a gas supply tube.
- 16. The flexible welding implement as recited in claim 15, comprising a tube support member, wherein the first tube, the second tube, and the third tube are disposed through the tube support member.
- 17. The flexible welding implement as recited in claim 10, comprising the handle.
 - 18. A welding implement, comprising:

a torch, comprising:

a torch head;

a tripod support system secured to the torch head to flexibly support the torch head, the tripod support system comprising:

a first leg comprising a first spring;
a second leg comprising a second spring; and
a third leg comprising a third spring;
the springs being disposed generally parallel to an axis of a
handle supporting the torch head.

- 19. The welding implement as recited in claim 18, wherein at least one of the legs is adapted to direct a fluid axially through the first spring.
- 20. The welding implement as recited in claim 19, wherein the first leg is adapted to direct a gas axially through the first spring.
- 21. The welding implement as recited in claim 20, wherein the second leg is adapted to direct a cooling fluid to the torch head axially through the second spring, and the third leg is adapted to direct the cooling fluid from the torch head axially through the third spring.
- 22. The welding implement as recited in claim 18, comprising a plurality of tubes and a tube support member, wherein each leg of the tripod support system comprises a tube disposed through the tube support member.
- 23. The welding implement as recited in claim 22, wherein each of the springs comprises a coiled wire spring secured to an end of one of the plurality of tubes.
- 24. The welding implement as recited in claim 22, comprising a handle coupleable to the torch, wherein the tripod support system enables the torch head to be flexibly positioned relative to the handle.
- 25. The welding implement as recited in claim 18, comprising a deformable support member extending through the tripod support system intermediate the first leg,

the second leg, and the third leg, wherein the deformable member retains the welding implement in a user-selected configuration.

- 26. The welding implement as recited in claim 25, wherein the deformable support member comprises a plurality of wires braided together.
- 27. The welding implement as recited in claim 26, wherein the plurality of wires comprises a first coiled portion disposed over the first leg, a second coiled portion disposed over the second leg, and a third coiled portion disposed over the third leg.
 - 35. A welding implement, comprising:
 - a torch head;
 - a plurality of tubes operable to convey fluids; and
- a plurality of coils comprising a helix of non-tubular material defining an axial flow path and secured to the torch head to enable the torch head to be angled relative to the plurality of tubes and to route fluids axially through the coils.
- 37. The welding implement as recited in claim 35, wherein a first coil is adapted to direct a gas axially through the first coil.
- 38. The welding implement as recited in claim 37, wherein a second coil is adapted to direct a cooling fluid to the torch head axially through the second coil.
- 39. The welding implement as recited in claim 38, wherein a third coil is adapted to direct the cooling fluid from the torch head axially through the third coil.
- 40. The welding implement as recited in claim 35, comprising a tube support member, wherein each of the plurality of tubes is disposed through the tube support member.

- 41. The welding implement as recited in claim 35, comprising a deformable support member extending through the plurality of coils and configured to retain a user-determined position of the torch head.
- 42. The welding implement as recited in claim 41, wherein the deformable support member comprises a plurality of wires braided together.

9. **APPENDIX OF EVIDENCE**

None.

10. APPENDIX OF RELATED PROCEEDINGS

None.